U.S. Serial No. 10/597,518

Attorney Docket: NEC 04P315

Amendment C

AMENDMENT TO THE CLAIMS:

Please amend claims 1-6, and add new claims 7-10, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): A power storage devicesecondary electrochemical cell comprising a cathode and an anode,

wherein:

the cathode comprises a cathode layer comprising nitroxyl polymer, and a cathode collector;

[[a]]the nitroxyl polymer [[which]] has a nitroxyl cation partial structure represented by the following chemical formula (I) in oxidation state and has a nitroxyl radical partial structure represented by the following chemical formula (II) in reduction state, in a cathode; employing a reaction for transferring an electron between the two states represented by the following equation (B) as an electrode reaction of the cathode:

$$\begin{pmatrix} 1 \\ 0 \\ -e - \\ 0 \end{pmatrix} \qquad (B)$$

and using athe anode comprises a lithium or lithium alloy [[anode]] as an anode active material;

wherein the cathode <u>layereontains</u> is impregnated with an electrolyte having an electrolyte salt dissolved in a solvent; and

the nitroxyl polymer is applied onto the cathode collector and is in direct contact with the anode.

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Claim 2 (currently amended): The power storage devices econdary electrochemical cell according to claim 1, wherein a lithium-tin alloy or a lithium-silicon alloy is used as the anode active material.

Claim 3 (currently amended): The power storage devices econdary electrochemical cell according to claim 1, using a wherein the cathode collector having comprising an aluminum plate and a conductive auxiliary layer comprising carbon as a main component, and the conductive auxiliary layer formed and integrated [[on]] the an aluminum electrode as a cathode eollector plate.

Claim 4 (currently amended): The power storage devices econdary electrochemical cell according to claim 1, [[using]] wherein the cathode collector comprises a carbon paper as a cathode collector.

Claim 5 (currently amended): The power storage devices econdary electrochemical cell according to claim 1, wherein the nitroxyl polymer is a polymer compound having a cyclic nitroxyl structure represented by the following chemical formula (5) in oxidation state:

$$\begin{array}{c|c}
R_3 & X & R_1 \\
 & & \\
R_4 & N & R_2
\end{array}$$

wherein each of R_1 to R_4 independently represents an alkyl group, and X represents a divalent group so that the chemical formula (5) forms a 5- to 7-membered ring, while X constitutes a part of a side chain or a main chain of the polymer.

Claim 6 (currently amended): The power storage devices econdary electrochemical cell according to claim 5, wherein the nitroxyl polymer is a polymer compound having a side chain

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containing a residue which removes at least one hydrogen atom bonded to an element forming at least one cyclic nitroxyl structure selected from the group consisting of a 2,2,6,6-tetramethylpiperidinoxyl cation represented by chemical formula (6), a 2,2,5,5-tetramethylpyrrolidinoxyl cation represented by chemical formula (7) and a 2,2,5,5-tetramethylpyrrolinoxyl cation represented by chemical formula (8).

Claim 7 (new): The secondary electrochemical cell according to claim 1, wherein a content of electro-conductivity imparting material in the cathode layer is 50% by weight or less.

Claim 8 (new): The second electrochemical cell according to claim 1, wherein the cathode layer consists essentially of the nitroxyl polymer.

Claim 9 (new): The second electrochemical cell according to claim 1, wherein the cathode layer consists of the nitroxyl polymer and a polymer electrolyte.

Claim 10 (new): The second electrochemical cell according to claim 1, wherein the secondary electrochemical cell is a coin-type cell.

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